



## ABSTRACT AND BIOGRAPHY

### **Code Breakers and Makers: WWII Management Lessons For NASA**

World War II was fought not only on the global battlefield, but also literally as a contest of minds. Cracking the code of the enemy's intentions while protecting one's own relayed information on troop strength, position of forces, future movement and mission objectives, etc. could mean the difference between victory and defeat in battle and literally the difference between life and death for thousands of combatants on both sides. The ability to learn the enemy's plans while safeguarding Allied efforts was one of the key elements in the objective and conduct of the war. To bring together individuals to meet a major challenge of code breaking on the one hand, code development and protection on the other, required creative approaches to team formation and individual skill contribution. This presentation will begin with the mysterious world of codes which were employed as early as the time of Caesar. We will then examine what took place to assemble, in urgency and secrecy in the midst of global war, the right skills, capabilities and environment to meet the challenge of code breaking, code making. The presentation will conclude with reflections on how such creative project and team development may provide lessons learned for NASA's future missions, particularly manned long duration space exploration and habitat development which will impose new challenges and require a range of skills and potentially non-traditional approaches to meet those challenges.

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Mr. Emond is a Collaboration Program Manager, NASA Headquarters, Innovative Partnerships Program Office. In this capacity, Mr. Emond is involved in fostering inter-organization and inter-government collaboration with NASA. Mr. Emond is the agency representative to the Federal Laboratory Consortium and held the position of FLC Mid-Atlantic Region Coordinator from 2006 to 2008. The Federal Lab Consortium is a national organization chartered by Congress to foster the transfer of technology from federal research labs to the private sector and other organizations.

Mr. Emond received a B.A. in History from Clark University in 1974. His early career was in the social service field primarily engaged in youth work including service as a Vista Volunteer. He received a Master's in Public Administration from the University of Connecticut in 1982. Through their graduate program Mr. Emond was nominated and became a Presidential Management Intern at NASA/Goddard Space Flight Center, 1982-1984. He was a contract specialist at Goddard Space Flight Center from 1984-1987 when he joined NASA Headquarters Office of Commercial Programs in 1987 as a policy analyst. Since that time Mr. Emond has held positions as a senior policy analyst and program manager at NASA Headquarters.